

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

Donaldson Company, Inc.
Attn: Mr. Dan Blackburn
815 Progress Drive
Dixon, Illinois 61021

<u>Application No.:</u> 87040086	<u>I.D. No.:</u> 103817AAD
<u>Applicant's Designation:</u> M1A1	<u>Date Received:</u> March 5, 2004
<u>Subject:</u> Air Filter Manufacturing Facility	
<u>Date Issued:</u> March 23, 2004	<u>Expiration Date:</u> December 1, 2008
<u>Location:</u> 815 Progress Drive, Dixon	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of Air filter manufacturing operation, charcoal filter manufacturing operation controlled by filters, three boilers, and large panel line pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., volatile organic material is less than 100 tons per year, individual hazardous air pollutant (HAP) to less than 10 tons per year and a combination of HAPs to less than 25 tons per year, etc.). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
2. Emissions of volatile organic material (VOM) and operation of the large panel line, charcoal filter operation, and air filter operation, including filter assembly lines 5013 and M1A1, shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Isopropyl Alcohol	0.07	0.7	0.07	0.7
Adhesives	2.5	25	2.5	25
Filter Media	0.7	6.7	0.7	6.7
Clean-Up Solvents	1.3	13.0	1.3	13.0
MEK (HAP)	0.79	7.9	0.79	7.9
Xylene (HAP)	0.15	1.5	0.15	1.5
Vanishing Lube	0.14	1.4	0.14	1.4
			Total:	56.2

These limits define the potential emissions of VOM and are based on maximum material usages, maximum VOM content for each material, and VOM usage as determined by the equation in Special Condition 10(c). Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

- 3a. Emissions and operation of all fuel combustion emission sources shall not exceed the following limits:

<u>Fuel Usage</u> <u>(mmscf/Mo)</u>	<u>Fuel Usage</u> <u>(mmscf/Yr)</u>	<u>Pollutant</u>	<u>Emission</u> <u>Factor</u> <u>(Lb/MMSCF)</u>	<u>Emissions</u> <u>(Tons/Mo)</u>	<u>Emissions</u> <u>(Tons/Yr)</u>
20.53	205.3	NO _x	100	1.03	10.3
		CO	84	0.87	8.7
		PM	7.6	0.1	0.8
		VOM	5.5	0.1	0.6
		SO ₂	0.6	0.1	0.1

These limits are based on maximum fuel usage and standard emission factors. Compliance with the annual limits shall be determined from a running total of 12 months of data.

- b. Natural gas shall be the only fuel(s) fired in all the fuel combustion emission sources. Use of any other fuel will require a revised permit.
4. This permit is issued based on negligible emissions of particulate matter from the charcoal filter operation. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
5. This permit is issued based on negligible emissions of ozone from the charcoal filter operation. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
6. This permit is issued based on emissions of VOM from each process emission unit not exceeding 8 pounds in any given hour, pursuant to 35 Ill. Adm. Code 215.301.
7. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs or such less quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program Permit (CAAPP) permit from the Illinois EPA.
8. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.

9. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

10. The Permittee shall maintain monthly records of the following items:

- a. Identification and amount of each solvent, clean-up solvent, adhesive, vanishing lube, and filter media used (lb or gal/mo and ton or gal/yr);
- b. VOM and individual HAP content of each solvent, clean-up solvent, adhesive, vanishing, lube, and filter media (lb VOM/gal or % weight);
- c. Plantwide calculations of VOM usage. The following equation shall be used to calculate VOM usage:

$$Te = \sum_{i=1}^n AiBi$$

Where:

Te = VOM usage in units of lb/mo or gal/mo;

n = Number of different solvents, clean-up solvent, adhesives, vanishing lube, and filter medias used each month;

i = Subscript denoting an individual solvent, clean-up solvent, vanishing lube, adhesive, and filter media;

Ai = Weight of VOM per volume of each solvent, clean-up solvent, vanishing lube, adhesive and filter media used each month in units of lbs VOM/gal or weight percent of VOM of each solvent used each month (% weight); and

Bi = Amount of each solvent, clean-up solvent, adhesive, vanishing lube, and filter media used each month in units of gal/mo or lb/mo.

- d. Calculations of VOM emissions from the plant;
 - e. Calculations of individual HAP emissions from the plant using the same equation in Condition 10(c) substituting VOM for individual HAPs; and
 - f. Total natural gas usage for all fuel combustion emission sources (mmscf/mo and mmscf/yr).
11. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from

the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

12. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
13. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

14. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
 - a. VOM and HAP usage and emission calculations (tons/month and tons/year).

It should be noted that the Bryan boiler less than 10 mmBtu/hr and all cutting and welding are exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(c), (aa) and (y), respectively.

It should be noted that this permit has been revised to incorporate Construction Permit #03020003 to include a large panel line.

It should also be noted that the M1A1 filter assembly line from Construction Permit 04020038 has been added to this permit.

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If you have any questions on this permit, please contact Randy Solomon at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RBS:jar

cc: Region 2
IEPA, Compliance Section/Kim Bolt
Lotus Notes/Brad Frost

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the filter manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of VOM, 25 tons per year of combined HAPs, and 10 tons per year of single HAPs, at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

E M I S S I O N S					
NO _x (Tons/Yr)	CO (Tons/Yr)	PM (Tons/Yr)	VOM (Tons/Yr)	HAPs	
				Single (Tons/Yr)	Combined (Tons/Yr)
10.3	8.7	1.3	56.9	< 10	< 25

RBS:psj